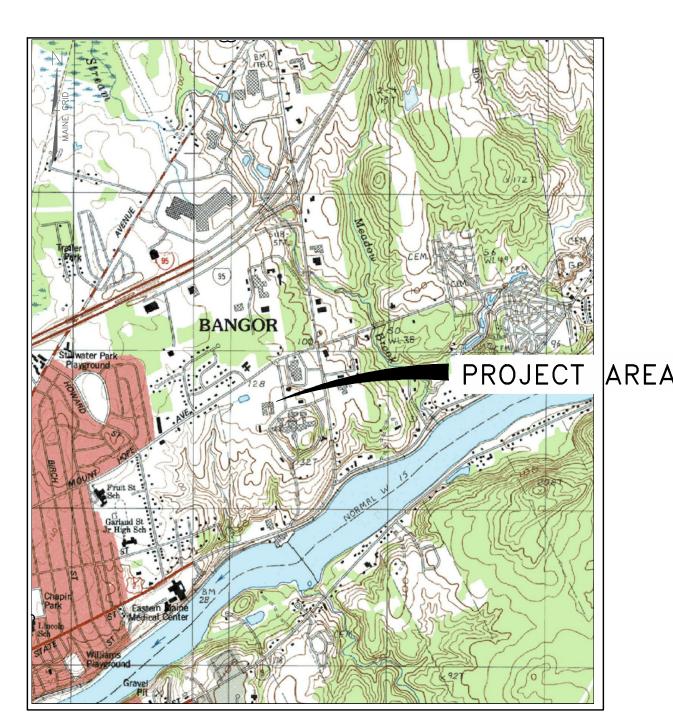
State of New Hampshire LOCATION MAP NOT TO SCALE

DOROTHEA DIX PSYCHIATRIC CENTER, BANGOR, MAINE

NEW LOADING DOCK

APRIL, 2023



PROJECT AREA MAP

SCALE: 1" = 2000' ±



INDEX OF DRAWINGS

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DuBois EKing Inc.

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DOROTHEA DIX PSYCHIATRIC CENTER

656 STATE STREET BANGOR, ME 04401

> NEW LOADING DOCK

DOROTHEA DIX PSYCHIATRIC CENTER

SHEET TITLE

TITLE SHEET

| DRAWN BY | DATE |
|------------|---------------|
| MTM | Apr. 2023 |
| CHECKED BY | D&K PROJECT# |
| JSK | 228646 |
| PROJ. ENG. | D&K ARCHIVE # |
| JSK | |

SHEET NUMBER

T1

SHEET 1 OF 7

GENERAL NOTES

GENERAL CONDITIONS

- 1. THE PROJECT AND PROPERTY OWNER IS DOROTHEA DIX PSYCHIATRIC CENTER. AN OWNER'S REPRESENTATIVE WILL BE APPOINTED PRIOR TO CONSTRUCTION TO REPRESENT THE OWNER AND PROVIDE DIRECTION DURING THE PROJECT.
- SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET. A SET OF CONSTRUCTION PLANS AND TECHNICAL SPECIFICATIONS SHALL BE ON SITE AND IN GOOD CONDITION AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
- 3. ALL PRIVATE PROPERTY OWNER COMMUNICATION SHALL BE CONDUCTED THROUGH THE OWNER'S REPRESENTATIVE. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL REVIEW CONDITIONS OF ENTRY AND ABIDE BY THEM.
- 4. CONTRACTOR SHALL INSTALL LIMIT OF DISTURBANCE FENCE PRIOR TO START OF CONSTRUCTION, AND THERE SHALL BE NO DISTURBANCE BEYOND THE LIMITS OF FENCE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY DUBOIS & KING INC. DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HERE ON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR OTHER AGENCIES WITH AUTHORITY OVER THE PROJECT.
- 6. CONTRACTOR SHALL LAY OUT THE CONSTRUCTION BASELINES, STAKE OUT LIMITS OF PROPOSED WORK AND REVIEW WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL APPLICABLE EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO CONSTRUCTION.
- 7. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL DEVICES AS NECESSARY AND IN A MANNER CONSISTENT WITH THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ITS LATEST REVISIONS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, WATER DIVERSION, AND DEWATERING REQUIREMENTS NEEDED FOR THE PROJECT IN ACCORDANCE WITH REGULATIONS AND PERMIT REQUIREMENTS.
- 9. IN CASE OF DISCREPANCY, REFER TO APPLICABLE CODE, STANDARD, OR REGULATION, IF APPROPRIATE.
- 10. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR TECHNICAL SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES.
- 11. LOCATE STAGING AREAS AWAY FROM SENSITIVE AREAS INCLUDING WETLANDS AND STREAM BUFFERS IN COMPLIANCE WITH REGULATIONS AND PERMIT REQUIREMENTS.
- 12. TO LIMIT INADVERTENT DAMAGE TO AND UNAUTHORIZED REMOVAL OF TREES ADJACENT TO THE WORK AREA, CONTRACTOR SHALL COORDINATE WITH OWNER AND OBTAIN APPROVAL PRIOR TO CUTTING OR TRIMMING TREES WITHIN AND ADJACENT TO THE WORK AREA.
- 13. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE COMMENCING ANY FABRICATION, ORDERING OF MATERIAL, OR PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- 14. THE PHRASES "REMOVE AND REPLACE" OR "REMOVE AND INSTALL" SHALL MEAN REMOVE EXISTING CONSTRUCTION AND REPLACE WITH NEW CONSTRUCTION MATERIALS AS NOTED ON THE DRAWINGS AND/OR SPECIFIED.

EXISTING INFORMATION

- 1. EXISTING TOPOGRAPHY AND SITE FEATURES WITHIN THE SURVEY BOUNDARY ARE BASED ON A GROUND SURVEY PERFORMED BY DUBOIS & KING, INC. ON JULY 12, 2022. THE HORIZONTAL DATUM IS MAINE STATE PLANE EAST NAD83 US SURVEY FEET. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- 2. THE CONTRACTOR SHALL FAMILIARIZE THEMSELF WITH THE EXISTING CONDITIONS OF THE SITE AND SURROUNDINGS PRIOR TO THE START OF ANY CONSTRUCTION.

CODES & PERMITS

- 1. IT IS NOT ANTICIPATED THAT LOCAL OR STATEWIDE PERMITS WILL BE REQUIRED FOR THIS PROJECT. THE LIMIT OF DISTURBANCE AREA WILL BE MINIMAL AND SITE WORK WILL BE LOCATED OUTSIDE OF RIGHT-OF-WAY BOUNDARY LINES.
- THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK IN STRICT ACCORDANCE WITH ALL MUNICIPAL, STATE, & FEDERAL ORDINANCES, CODES, RULES, AND LAWS HAVING JURISDICTION. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK WHICH MANY NOT COMPLY COMPLETELY WITH ALL MUNICIPAL, STATE, & FEDERAL ORDINANCES, CODES, RULES, AND LAWS HAVING JURISDICTION. THESE MAY INCLUDE, BUT ARE NOT LIMITED TO:
 - a. THE AMERICAN DISABILITY ACT WITH REGARDS TO DIMENSIONS AND GRADES
 - b. MAINE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
 - c. TOWN PERMITS AS REQUIRED.

UTILITY & EXCAVATION

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND DETERMINING ALL UTILITIES (ABOVE AND BELOW GROUND) WITHIN THE PROJECT LIMITS, AND TO TAKE THE NECESSARY PRECAUTIONS TO

PROTECT UTILITIES DURING CONSTRUCTION. CONTACT DIG—SAFE AT 1-800-DIG-SAFE (<u>WWW.DIGSAFE.COM</u>) A MINIMUM OF 72 HOURS BEFORE GROUND DISTURBANCE. ALL DISTURBANCE OR DAMAGE TO UTILITIES BY CONTRACTOR ACTIVITIES WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL REPAIRS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OR THE OWNER.

- 2. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL UTILITY RELOCATION AND INSTALLATION WITH THE APPROPRIATE UTILITY. THE APPROPRIATE UTILITY OR ITS AUTHORIZED REPRESENTATIVE WILL PERFORM ADJUSTMENTS OF ALL UTILITY STRUCTURES.
- 3. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE PLANS. UTILITIES SHALL BE MAINTAINED IN ACTIVE OPERATION AT ALL TIMES. PROVIDE BYPASS PIPING AND PUMPING WHERE REQUIRED. ALL NEW UTILITY SYSTEMS SHALL BE OPERATIONAL BEFORE ANY EXISTING SYSTEMS ARE ABANDONED OR REMOVED. IF EXISTING UTILITIES ARE TAKEN OUT OF SERVICE FOR CONNECTIONS, THE TIMING SHALL BE APPROVED BY THE ENGINEER.
- 4. VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO CONSTRUCTION.
 - EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING POWER,
 COMMUNICATIONS, WATER OR GAS LINES TO PREVENT DAMAGE TO THESE LINES.
 - b. IMMEDIATELY REPAIR ANY DAMAGE TO EXISTING UTILITIES IN A MANNER APPROVED BY THE ENGINEER, AT NO COST TO THE OWNER.
 - C. ENSURE THAT ALL PIPES, CATCH BASINS, MANHOLES, SWALES, ETC. WITHIN AND NEAR THE AREA OF WORK ARE KEPT FREE FROM MATERIAL THAT WOULD HAMPER THE PERFORMANCE OF THE DRAINAGE SYSTEMS. FURNISH AND INSTALL SOIL EROSION AND SEDIMENTATION CONTROL DEVICES AS SHOWN ON THE CONTRACT DRAWINGS. UPON COMPLETION OF CONSTRUCTION, REMOVE ACCUMULATED SEDIMENT AND REMOVE CONTROL DEVICES.

MEETINGS, SUBMITTALS AND REQUIRED INSPECTIONS

- 1. THE CONTRACTOR SHALL PARTICIPATE IN A PRE—CONSTRUCTION CONFERENCE. PRIOR TO CONSTRUCTION ACTIVITY INCLUSIVE OF MOBILIZATION.
- 2. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER MATERIAL SLIPS FOR ALL MATERIALS AND ITEMS USED ON THE PROJECT PURSUANT TO THE TECHNICAL SPECIFICATIONS.

RESTORATION OF SURFACES

1. AT THE COMPLETION OF WORK, THE CONTRACTOR MUST RESTORE ACCESS ROADS, TOWN HIGHWAYS AND STAGING AREAS TO PRE—CONSTRUCTION CONDITION. RESTORATION MAY INCLUDE BUT NOT LIMITED TO PLACEMENT OF PAVEMENT OR GRAVEL ON EXISTING DRIVES AND / OR APPLICATION OF TOPSOIL, GRASS SEED, FERTILIZER, AND MULCH TO AFFECTED GRASSED AREAS.

CIVIL NOTES

MATERIAL NOTES:

- 1. ALL MATERIALS USED ON THIS PROJECT SHALL CONFORM TO THE MAINE DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. FOR ANY DISCREPANCY BETWEEN THE PLANS AND MATERIAL SPECIFICATIONS, THE TECHNICAL SPECIFICATIONS SHALL TAKE PRECEDENCE OVER NOTES CONTAINED ON THESE PLANS.
- 2. ALL EARTHEN MATERIALS USED ON SITE SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. NEW EARTHEN MATERIAL SHALL BE CONSISTENT WITH ON SITE MATERIAL. THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO IMPORTING ANY NEW EARTHEN MATERIAL TO THE SITE.

SITE MAINTENANCE

- 1. CONTRACTOR SHALL APPLY WATER TO SITE AREAS TO SUPPRESS POTENTIAL FUGITIVE DUST EMISSIONS, IF NEEDED.
- 2. PREVENT WATER PONDING RESULTING FROM CONSTRUCTION OPERATIONS. PROMPTLY REMOVE ANY PONDED WATER TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- 4. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIALS FROM THE PROPERTY AND RESTORE THE CONTRACTORS MATERIAL AND EQUIPMENT STAGING AREA TO ITS ORIGINAL CONDITION, AS APPROVED BY THE OWNER'S REPRESENTATIVE.

<u>GRADING</u>

- I. SUITABLE EXCAVATED ON—SITE MATERIAL SHALL BE UTILIZED IN LOCATIONS THAT REQUIRE FILL OR BACKFILL.
- 2. ANY EXCESS MATERIAL TO BE DISPOSED OF OFF SITE SHALL BE REMOVED AT NO ADDITIONAL COST UNLESS OTHERWISE APPROVED IN ADVANCE BY THE ENGINEER. MATERIAL SHALL BE DISPOSED OF IN AN APPROVED LOCATION AWAY FROM WETLANDS, FLOODPLAIN, OR OTHER SENSITIVE AREAS.
- 3. COMPACTION TESTING IS REQUIRED ON FILL AND BACKFILL AREAS. REFER TO APPLICABLE DETAILS.
- 4. PLACE 4 INCHES MINIMUM OF TOPSOIL AND SEED ON DISTURBED AREAS.

<u>DRAINAGE</u>

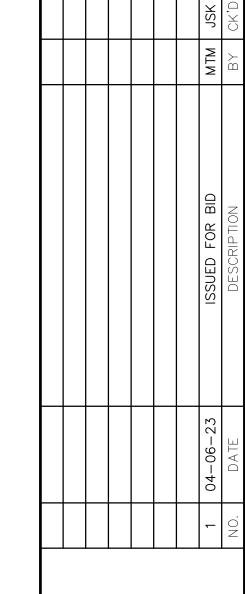
1. WHERE STORMWATER COLLECTION, CONVEYANCE AND TREATMENT INFRASTRUCTURE IS TO BE CONSTRUCTED, VERIFY THE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.



MANAGEMENT • DEVELOPMEN'
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656 STATE STREET BANGOR, ME 04401

> NEW LOADING DOCK

DOROTHEA DIX PSYCHIATRIC CENTER

SHEET TITLE

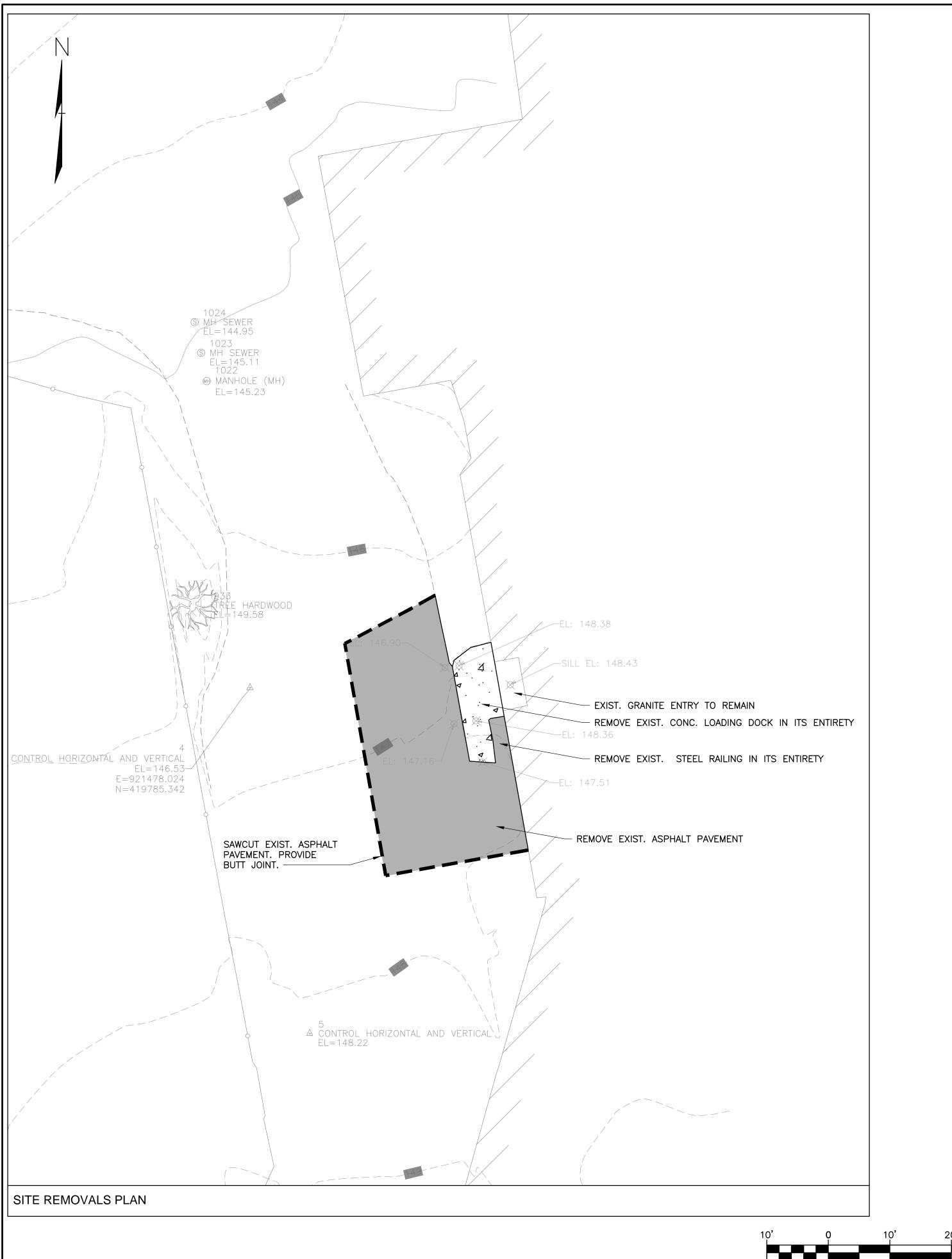
GENERAL NOTES

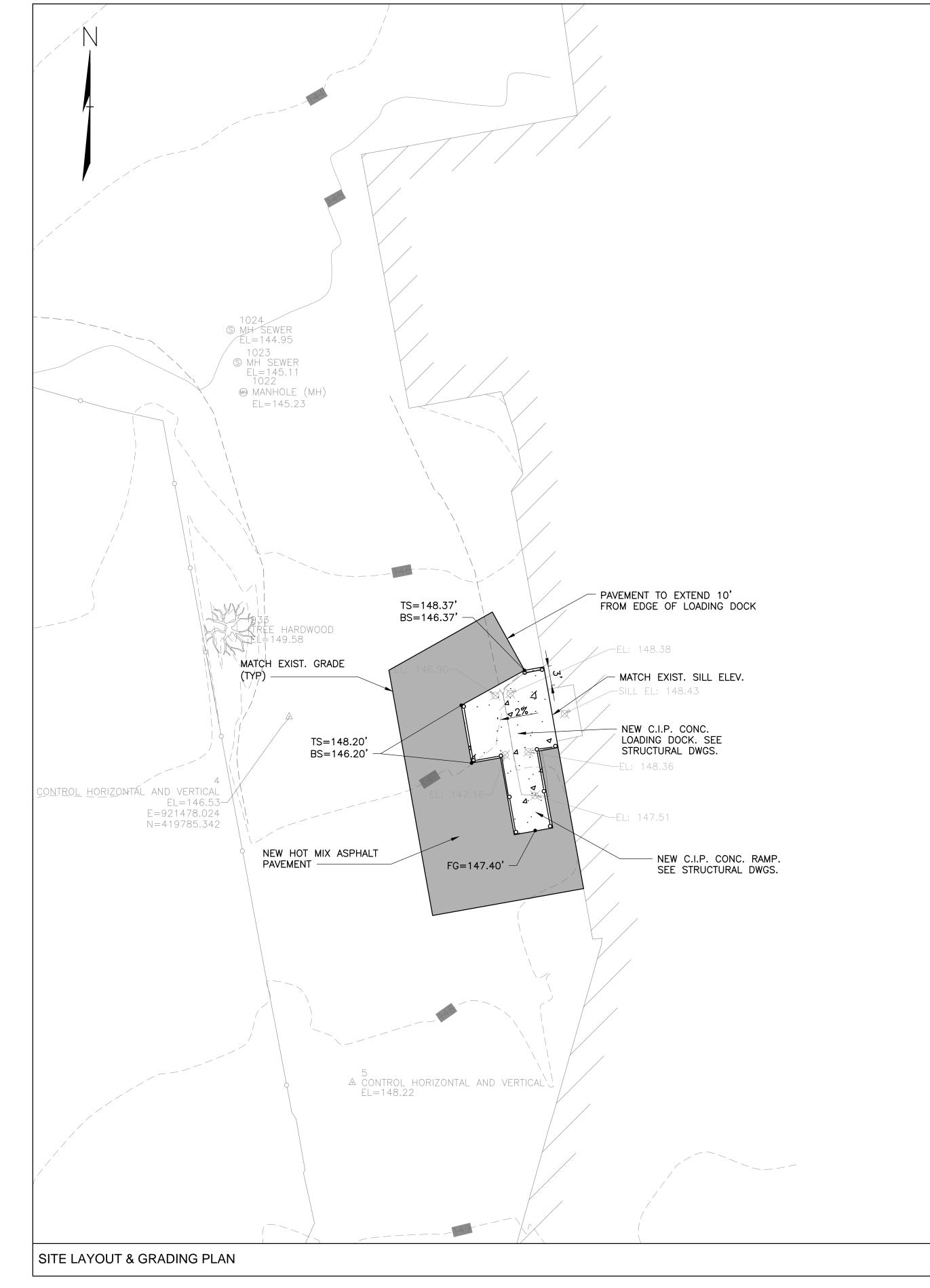
| DRAWN BY | DATE |
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| MTM | Apr. 2023 |
| CHECKED BY | D&K PROJECT # |
| JSK | 228646 |
| PROJ. ENG. | D&K ARCHIVE # |
| JSK | |

SHEET NUMBER

C1

SHEET 2 OF 7





10' 0 10' 20' 40'

SCALE IN FEET

C2

SHEET NUMBER

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PSYCHIATRIC CENTER

656 STATE STREET

BANGOR, ME 04401

NEW LOADING

DOCK

DOROTHEA DIX PSYCHIATRIC CENTER

SHEET TITLE

SITE PLAN

CHECKED BY

PROJ. ENG.

JSK

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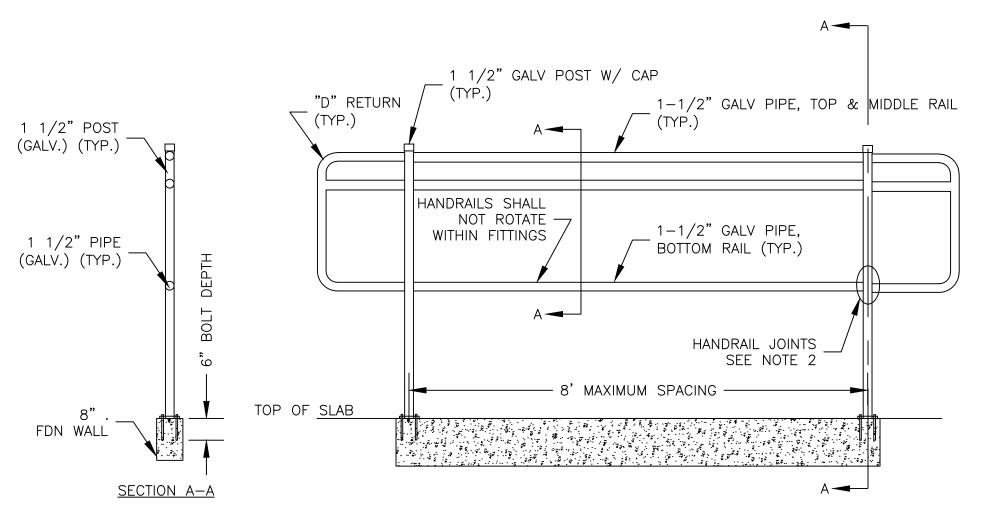
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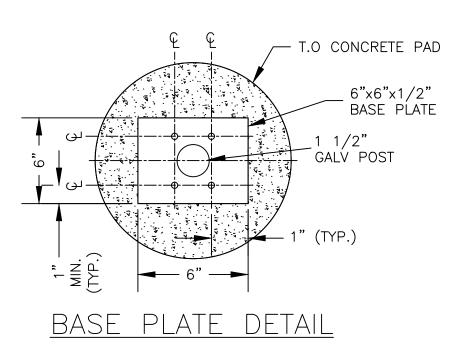
SHEET 3 OF 7

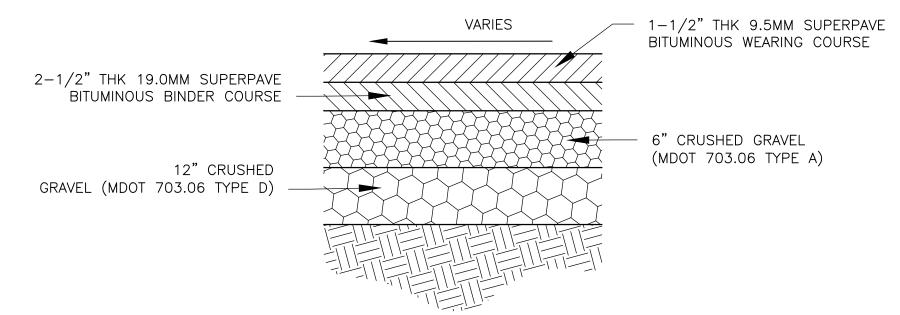


NOTES:

- ALL HANDRAILS SHALL CONFORM TO CURRENT INTERNATIONAL BUILDING CODES (IBC), AMERICAN DISABILITY ACT
 ACCESSIBILITY GUIDELINES (ADAAG). IT SHALL BE THE RESPONSIBLILITY OF THE CONTRACTOR TO NOTIFY THE PROJECT
 ENGINEER OF RECORD, IN WRITING, ANY CONFLICTS WITH CURRENT HANDRAIL CODES.
- 2. HANDRAIL JOINTS MAY BE COPED & WELDED OR MECHNICAL FITTINGS. ALL COPED & WELDED JOINTS SHALL BE SMOOTH AND TRUE TO CONTOUR OF WELD MEMBER; ALL WELDING SPLATTER SHALL BE REMOVED. APPROVED MECHNICAL FITTING MANUFACTURERS SHALL BE KLAMP FITTINGS BY KEE INDUSTRIAL; SPEED RAIL BY HOLLAENDER; SLIP—ON BY McNICHOLS; OR APPROVED EQUAL.
- 3. ALL HANDRAIL COMPONENTS, INCLUDING BUT NOT LIMITED TO RAILS, POSTS AND CAPS, SHAL BE BLACK VINYL COATED OR PRIMED AND PAINTED (TWO COATS OF WEATHER RESISTANT BLACK)/

COMMERCIAL HANDRAIL DETAIL NOT TO SCALE



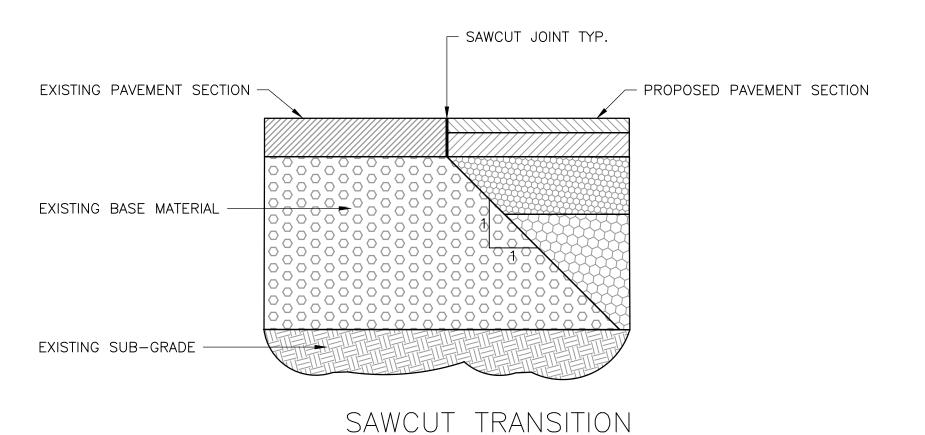


- NOTES:

 1. REMOVE ALL UNSUITABLE MATERIAL BELOW PAVEMENT SECTION TO THE SATISFACTION OF THE ENGINEER.
- 2. IN NON-CURB AREAS PAVEMENT SUB-BASE MATERIAL SHALL EXTEND 1' BEYOND EDGE-OF-PAVEMENT.
- 3. COMPACT GRAVEL TO 95% MIN. OF MAX. DENSITY OBTAINABLE AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557, METHOD C (MODIFIED PROCTOR)

PARKING LOT PAVEMENT DETAIL

NOT TO SCALE



Note:

1. APPLY TACK COAT TO CLEAN, SMOOTH VERTICAL SAWCUT EDGE OF EXISTING PAVEMENT

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| |
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SHEET NUMBER

C3

SHEET 4 OF 7

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EARTHWORK

- I. SUBMITTALS: SUBMIT TEST REPORTS ON BORROW MATERIAL, VERIFICATION OF FOOTING SUBGRADE MATERIAL, IN-PLACE SOIL DENSITY TEST AND OPTIMUM MOISTURE-MAXIMUM DENSITY CURVES.
- 2. EXISTING UTILITIES: LOCATE BY HAND EXCAVATION AND PROVIDE PROTECTION FROM DAMAGE. COOPERATE WITH OWNER AND UTILITY EXCAVATIONS AND PROVIDE WARNING LIGHTS. SLOPE SIDES OF EXCAVATIONS AS REQUIRED FOR SAFE WORKING CONDITIONS. COMPLY WITH COMPANIES FOR MAINTAINING SERVICES.
- 3. PROTECTIONS: PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES IN AREAS OF WORK. BARRICADE OPEN EXCAVATIONS AND PROVIDE WARNING LIGHTS. SLOPE SIDES OF EXCAVATIONS AS REQUIRED FOR SAFE WORKING CONDITIONS. COMPLY WITH REGULATIONS OF AUTHORITIES HAVING JURISDICTION INCLUDING OSHA REGULATIONS FOR ALL EXCAVATION AND BACKFILLING WORK.
- 4. SATISFACTORY SOIL MATERIALS: DEFINED AS THOSE COMPLYING WITH ASTM D 2487 SOIL GROUPS GW, GP, GM, SM, SW, AND SP.
- 5. DRAINAGE FILL MATERIAL: WASHED, NARROWLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL MEETING THE REQUIREMENTS CALLED OUT FOR ITEM 703.13 CRUSHED STONE 3 INCH IN THE LATEST EDITION OF THE MAINE DEPARTMENT OF TRANSPORTATION AGENCY (MAINEDOT) STANDARD SPECIFICATION FOR CONSTRUCTION.
- 6. SUBBASE FILL MATERIAL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, OR CRUSHED STONE, OR CRUSHED SLAG FREE OF VEGETATION, DEBRIS AND OTHER OBJECTIONABLE MATERIALS.
- 7. EXCAVATION: REMOVE AND DISPOSE OF MATERIAL ENCOUNTERED TO OBTAIN REQUIRED SUBGRADE ELEVATIONS. FINAL CUTS TO SUBGRADE TO BE DONE WITH A SMOOTH-EDGED BUCKET. REMOVE AND REPLACE DISTURBED MATERIAL WITH COMPACTED GRANULAR FILL.
- 8. BACKFILL AND FILL: PLACE SATISFACTORY BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH, COMPACTING EACH LAYER TO REQUIRED MAXIMUM DENSITY. DO NOT PLACE MATERIALS ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN ICE OR FROST. USE STRUCTURAL FILL UNDER INTERIOR SLABS ON GRADE. USE STRUCTURAL FILL UNDER STRUCTURES AND WITHIN 5 FEET OF BUILDING LINES. USE 3" OF COMPACTED CRUSHED STONE UNDER FOOTINGS.
- 9. COMPACTION: COMPACT EACH LAYER OF BACKFILL AND FILL SOIL MATERIALS FOR STRUCTURES, SLABS, AND FOR FOOTINGS TO 95 PERCENT MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557. CRUSHED STONE TO BE COMPACTED WITH 3 TO 5 PASSES OF A VIBRATORY COMPACTOR WITH STATIC WEIGHT OF AT LEAST 500 LBS.

<u>CONCRETE</u>

- 1. ALL CONCRETE SHALL CONFORM TO REQUIREMENTS AND RECOMMENDATIONS OF ACI 318 "BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE" AND ACI FIELD REFERENCE MANUAL
- 2. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301," SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" EXCEPT AS MODIFIED OR SUPPLEMENTED BELOW.
- 3. SHOP DRAWINGS AND DATA: SUBMIT SHOP DRAWINGS COMPLYING WITH ACI MNL-66 "ACI DETAILING MANUAL" AND PRODUCT DATA FOR ACCESSORIES, ADMIXTURES AND CURING COMPOUNDS.
- 4. CONCRETE COMPRESSIVE DESIGN STRENGTHS AND MIX PROPORTIONS SHALL BE AS OUTLINED BELOW. MIX PROPORTIONS AND DESIGNS SHALL BE SUBMITTED FOR APPROVAL. LIMIT MAXIMUM WATER—SOLUBLE CHLORIDE ION CONTENT IN CONCRETE BY WEIGHT OF CEMENT FOR CAST—IN—PLACE CONCRETE TO 0.3 FOR INTERIOR CONCRETE AND 0.15 FOR EXTERIOR CONCRETE.

CONCRETE USAGE

| OUTTOINETE OUTTOE | | | | |
|----------------------------|---------|----------------|----------------------|------|
| W/CM RATIO | AIR | CONCRETE CLASS | COMPRESSIVE STRENGTH | MAX |
| FÓOTINGS | 5%±1.5% | F0, S0, W0, C1 | 3,000 PSI @ 28 DAYS | 0.55 |
| EXTERIOR WALLS | 6%±1.5% | F2, S0, W0, C1 | 4,500 PSI @ 28 DAYS | 0.45 |
| EXTERIOR SLABS ON GRADE | 6%±1.5% | F3, S0, W0, C2 | 5,000 PSI @ 28 DAYS | 0.40 |

- STEEL REINFORCEMENT INSTALLATION (INCLUDING WELDED WIRE REINFORCEMENT): COMPLY WITH CRSI "MANUAL OF STANDARD PRACTICE"
 FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT. CLEAN REINFORCEMENT OF LOOSE RUST AND MILL SCALE, EARTH, ICE,
 AND OTHER FOREIGN MATERIALS THAT REDUCE BOND TO CONCRETE. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT
 AGAINST DISPLACEMENT.
- 6. REINFORCING STEEL: ASTM A 615 GRADE 60.
- 7. JOINT SEALANT: SIKAFLEX 1A AS MANUFACTURED BY SIKA CORPORATION OR APPROVED EQUAL.
- 8. ALL CONCRETE SHALL BE READY-MIX CONCRETE CONFORMING TO ASTM C 94 EXCEPT THAT ADDITION OF WATER WILL NOT BE PERMITTED.
- 9. REINFORCEMENT SHALL BE SECURELY TIED IN ITS PROPER PLACE BEFORE AND DURING CONCRETE PLACEMENT OPERATIONS USING APPROVED CHAIRS AND SPACERS AS REQUIRED.
- 10. PROVIDE CLEARANCES FROM FACES OF CONCRETE TO REINFORCEMENT AS FOLLOWS (UNLESS NOTED OTHERWISE):
 - A. CONCRETE CAST AGAINST EARTH: 3" (ALL BARS)
 - CONCRETE EXPOSED TO EARTH OR WEÀTHER
 i. #6 AND LARGER: 2"
 - ii. #5 AND SMALLER: 1-1/2"
 - C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - i. SLABS, WALLS AND JOISTS: 3/4" (#11 AND SMALLER)ii. BEAMS AND COLUMNS (MAIN STEEL AND TIES): 1-1/2" (ALL BARS)
- 11. ALL CONCRETE SHALL BE CONSOLIDATED USING MECHANICAL VIBRATING EQUIPMENT.
- 12. FORMED CONCRETE NOT EXPOSED TO VIEW SHALL RECEIVE A ROUGH FORM FINISH; FORMED CONCRETE EXPOSED TO VIEW SHALL RECEIVE A SMOOTH FORM FINISH.
- 13. CONCRETE SLABS SHALL BE WET CURED, USE OF MEMBRANE-FORMING CURING COMPOUND IS PROHIBITED.
- 14. CONCRETE SLABS SHALL RECEIVE A BROOM FINISH FOR EXTERIOR CONCRETE.
- 15. COMPRESSION TEST: ACI 318, PREPARE 4 CYLINDERS PER TEST SET FOR EACH COMPOSITE SAMPLE. (3) CYLINDERS SHALL BE TESTED
 AT 28 DAYS
 - AT 28 DAYS
 A. AT LEAST ONCE A DAY
 - B. AT LEAST FOR EACH 150 CUBIC YARDS OF CONCRETE
 - C. AT LEAST ONCE FOR EACH 5,000 SQUARE FEET OF SURFACE ARE FOR SLABS OR WALLS
- 16. APPLY PROSOCO SALTGUARD WB OR APPROVED EQUAL TO CURED CONCRETE SURFACE PER MANUFACTURER'S INSTRUCTIONS.

POST-INSTALLED ANCHORS:

- 1. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC.
 - A. REBAR DOWELING INTO CONCRETE
 - i. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - a. HILTI HIT—HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VC 150/300 WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR—4868
 - ii. BASIS OF DESIGN INCLUDES THE FOLLOWING DESIGN PARAMETERS:
 - a. CRACKED CONCRETE
 - b. WATER-SATURATED CONCRETE
 - c. BASE MATERIAL TEMPERATURE OF 23-104 DEGREES FAHRENHEIT
 - d. ALLOWABLE WITH HAMMER—DRILL, HOLLOW DRILL BIT SYSTEM, AND CORE DRILLING METHODS

 CURRENT ICC—ES REPORT WITH APPROVAL FOR DEVELOPMENT OF BAR USING ACL PROVISIONS FOR EMBEDI
 - e. CURRENT ICC-ES REPORT WITH APPROVAL FOR DEVELOPMENT OF BAR USING ACI PROVISIONS FOR EMBEDMENT DEPTHS GREATER THAN 20 BAR DIAMETERS
 - B. ANCHORAGE TO CONCRETE
 - i. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - a. HILTI HIT—HY 200 SAFE SET SYSTEM WITH THE HILTI HIT—Z ROD PER ICC ESR—4868
 - i. BASIS OF DESIGN INCLUDES THE FOLLOWING DESIGN PARAMETERS:
 - a. CRACKED CONCRETE
 - b. WATER-SATURATED CONCRETE
 - BASE MATERIAL TEMPERATURE OF 23-104 DEGREES FAHRENHEIT
 - d. ALLOWABLE WITH HAMMER-DRILL, HOLLOW DRILL BIT SYSTEM, AND CORE DRILLING METHODS
- 2. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS THAT HAVE BEEN SEALED BY ANOTHER LICENSED ENGINEER DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF MEETING THE PERFORMANCE OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN—SERVICE TEMPERATURE, INSTALLATION TEMPERATURE, MOISTURE CONDITION OF CONCRETE, AND DRILLING METHODS.
- 3. INSTALL ANCHORS PER THE MANUFACTURER PRINTED INSTALLATION INSTRUCTIONS (MPII), AS INCLUDED IN THE ANCHOR PACKAGING.
- 4. THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THE ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE OMMENCEMENT OF ANCHOR INSTALLATION.
- 5. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
- 6. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS BY HILTI FERROSCAN, GPR, X-RAY OR OTHER MEANS

STRUCTURAL STEEL

- 1. CODES AND STANDARDS: AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES;" AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" INCLUDING "COMMEN— TARY;" AWS "STRUCTURAL WELDING CODE;" COMPLY WITH APPLICABLE PROVISIONS EXCEPT AS OTHERWISE INDICATED.
- 2. SHOP DRAWINGS: SHOW COMPLETE DETAILS AND SCHEDULES (IF REQUIRED) FOR FABRICATION, ASSEMBLY AND ERECTION. FURNISH ANCHOR BOLTS REQUIRED FOR INSTALLATION IN OTHER WORK; FURNISH TEMPLATES FOR BOLT INSTALLATION.
- 3. PROVIDE CERTIFICATION THAT WELDERS EMPLOYED IN WORK HAVE SATISFACTORILY PASSED AWS QUALIFICATION TESTS WITHIN 2 YEARS FOR TYPE OF WELDING TO BE PERFORMED.
- 4. STRUCTURAL STEEL SHALL BE AS FOLLOWS:

W AND WT SHAPES: ASTM A992 OTHER SHAPES, BARS AND PLATES: ASTM A36

STRUCTURAL TUBING:

PIPE:

ASTM A500, GRADE B

ASTM A 53, GRADE B OR ASTM A501

ANCHOR RODS:

ASTM F1554 GR. 36

- 5. FABRICATION: COMPLY WITH AISC "SPECIFICATIONS" AND FINAL SHOP DRAWINGS. MARK AND MATCH-MARK UNITS FOR FIELD ASSEMBLY.
- 6. COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE, AND QUALITY OF WELDS.
- 7. STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.
- 8. TOUCH-UP GALVANIZED COATING WHERE DAMAGED OR MISSING AND REPAIR GALVANIZING TO COMPLY WITH ASTM A780.



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> NEW LOADING DOCK

DOROTHEA DIX PSYCHIATRIC CENTER

SHEET TITLE

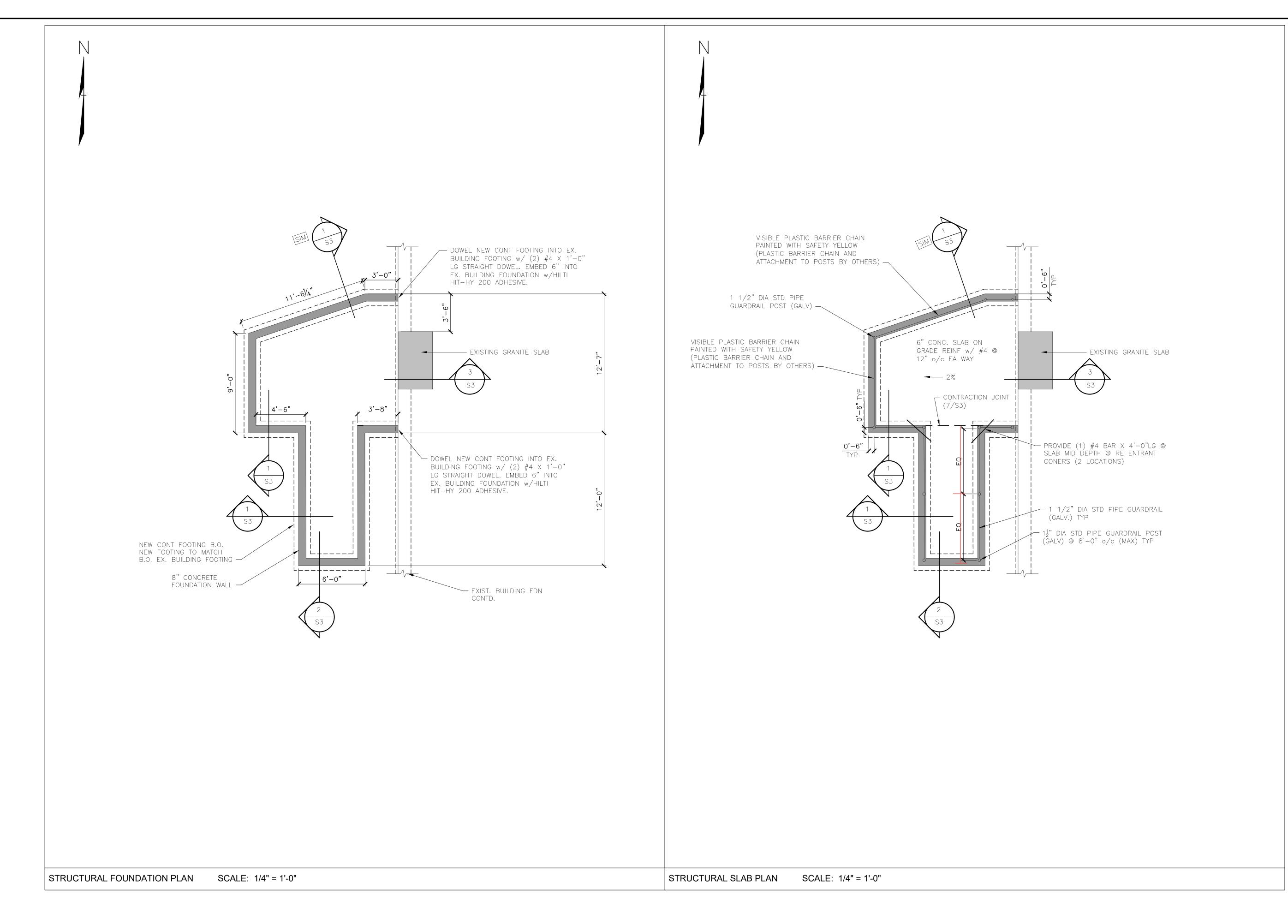
STRUCTURAL NOTES

| DRAWN BY | DATE |
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| MTM | Apr. 2023 |
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S1

SHEET 5 OF 7



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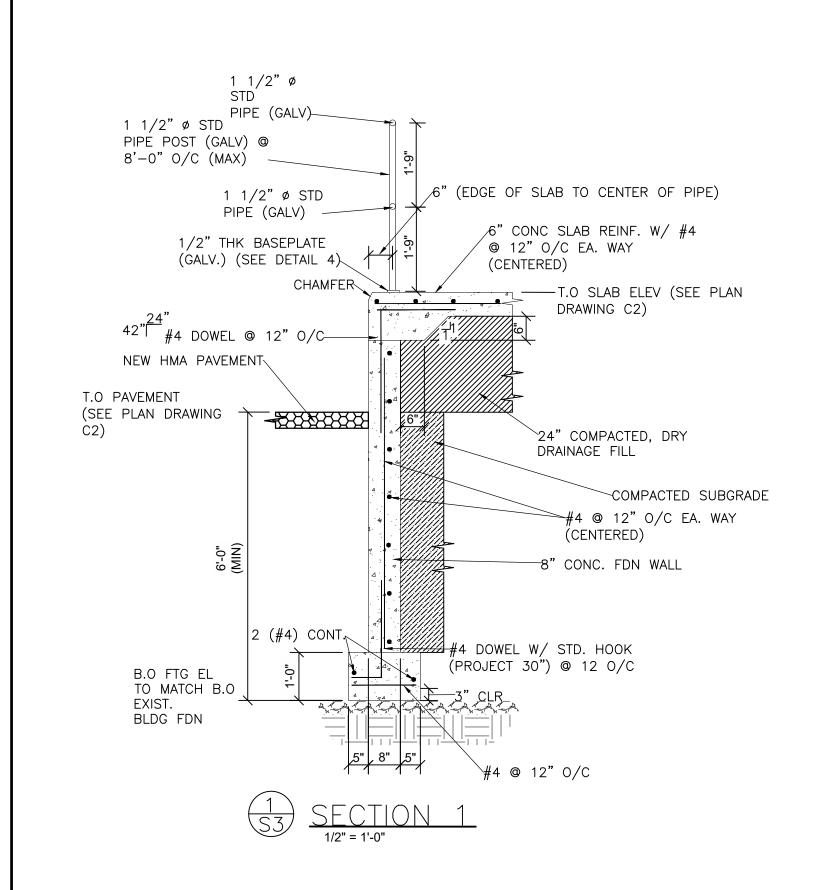
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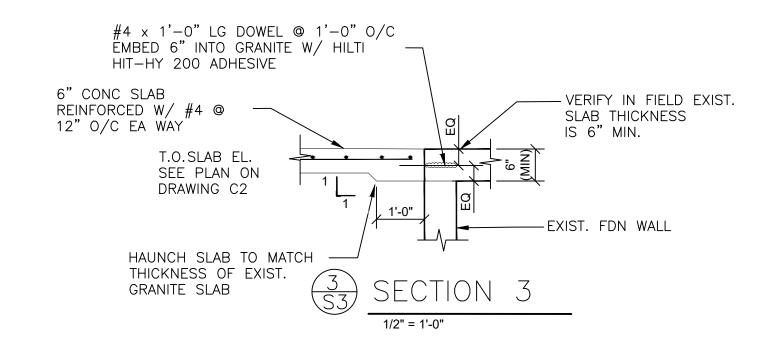
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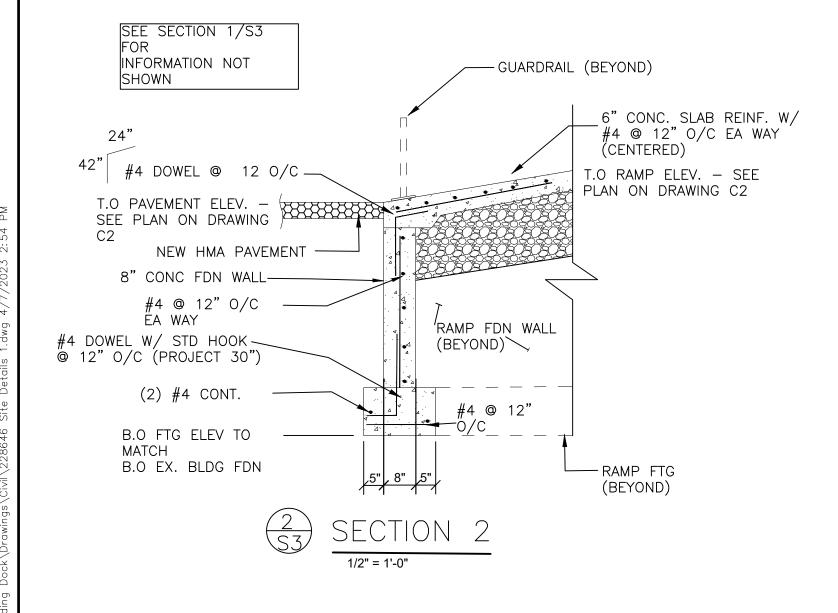
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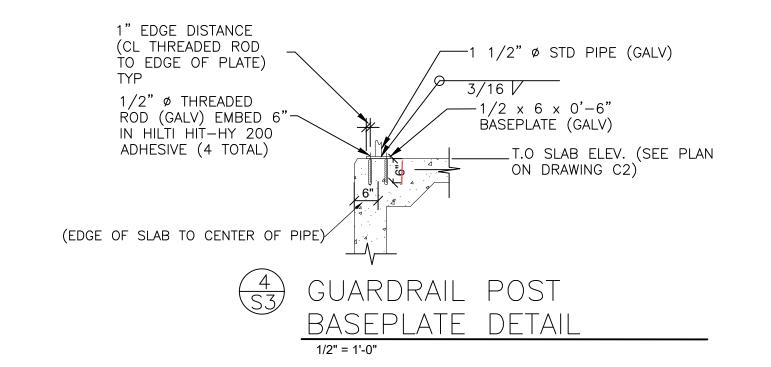
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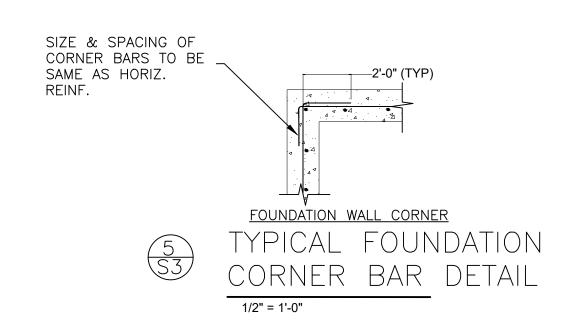
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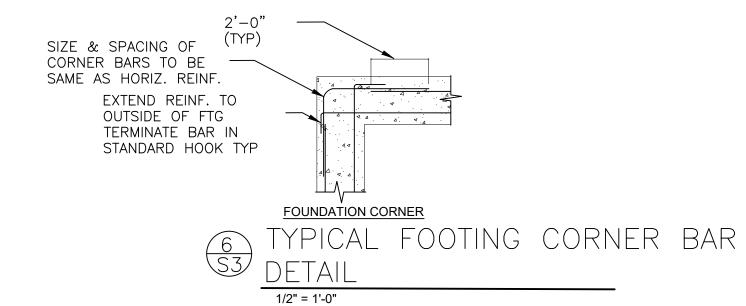


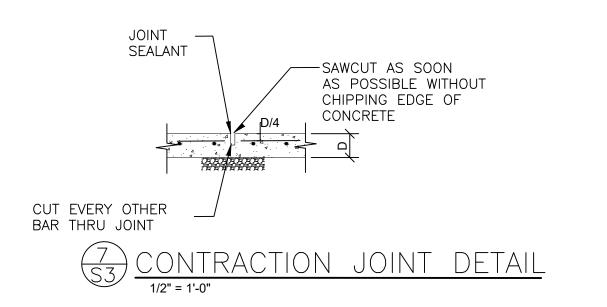












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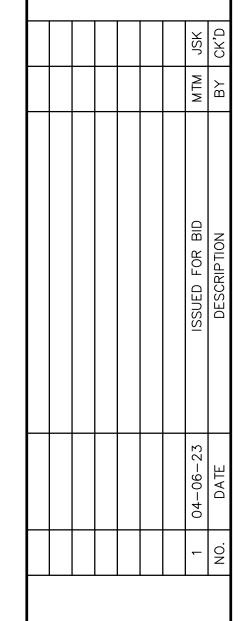
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STRUCTURAL SECTIONS & DETAILS

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S3

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